

Computer Science Teacher Retention

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Introduction

- Demand for CS (Computer Science) in industry greatly outstrips supply [1]
- Unreasonably difficult to obtain license to teach CS
- Too few CS teachers in Wisconsin [2]

Before we can increase the number of teachers in CS, we first need to prepare and retain the current CS teachers.

Objective

- Perform a qualitative study to determine the factors that affect teacher retention

Methods

- Perform grounded theory approach to identify patterns
- Contact teachers who taught CS in the past
- Interview what classes they taught and still teach
- Transcribe teacher interviews to analyze results
- Compare teachers that still teach CS to those who don't.

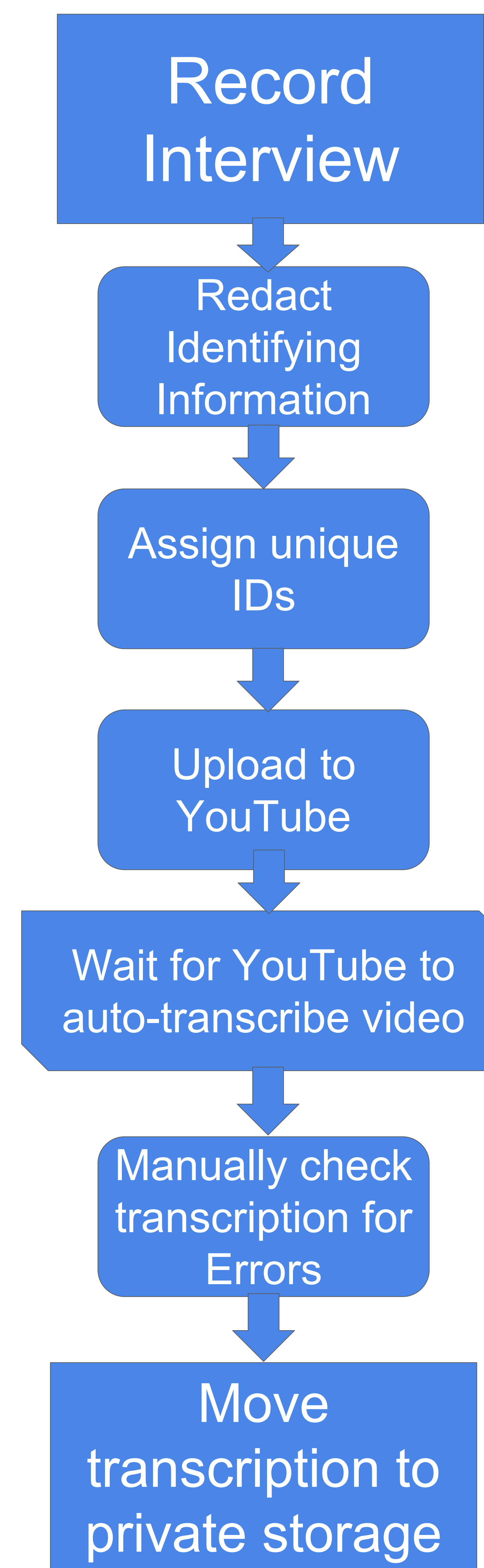
Data

- Compiled list of over 200 Wisconsin high school teachers with CS experience
- List contained ECS participants and Wisconsin CS licence holders
- Teacher personal emails unavailable, retrieved from teacher's school website

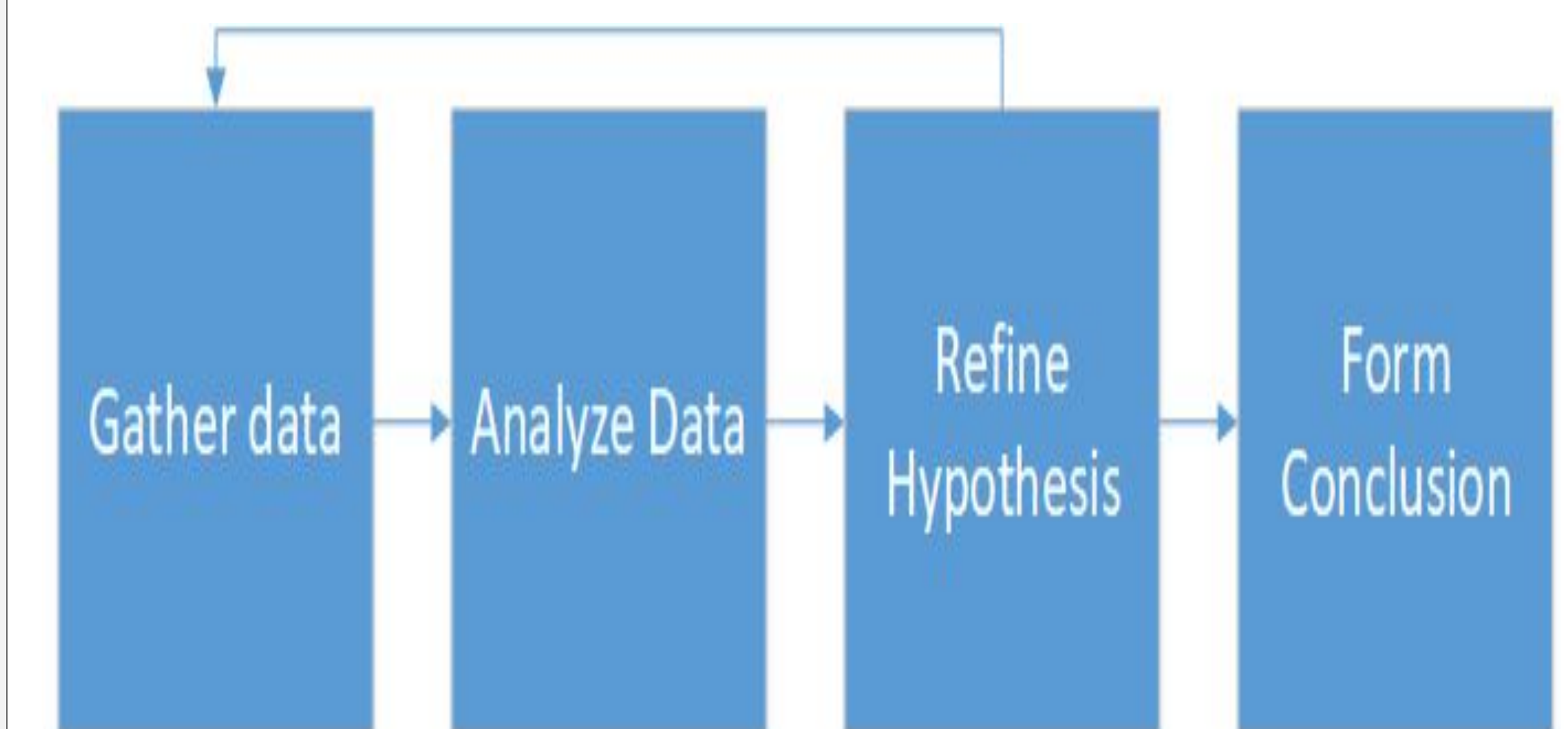
Contact

- Teachers contacted through mass email, requesting 30 minute recorded interview.
- Scheduled interviews recorded audio with Zoom

Transcription



Grounded Theory



Results

- YouTube audio transcription had 90%+ accuracy
- Transcripts are accessible without compromising teacher identity
- Transcript data revealed a number of factors that correlate with CS retention

References

1. Computer Science Teachers Association. Bugs in the System. CTSA. 2013.
2. Code.org. Support K-12 Computer Science Education in Wisconsin.

